AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-7 (cancelled)

8. (new) A method for the prevention and treatment of central and peripheral nervous system disorders involving protein misfolding or misaggregation of beta-amyloid peptides, alpha synuclein, prion protein and/or huntingtin, comprising administering to a patient in need thereof an effective amount of a compound of general formula (I):

$$R^{1} \xrightarrow{R^{3}} R^{4} \xrightarrow{R^{5}} R^{5}$$
(I)

wherein:

n is 0, 1 or 2;

 R^1 and R^2 , independently of each other, are H, OH or OCH₃; R^3 is H or CH₃;

 R^4 is H, C_1 - C_3 straight or branched alkyl or, together with R^3 , forms a five to seven-membered carbocyclic ring; and R^5 and R^6 , independently of each other, are H or C_1 - C_5 straight or branched alkyl.

9. (new) The method according to claim 8 wherein the central and peripheral nervous system diseases are Alzheimer's Disease, Lewy body disease, Parkinson's Disease, spongiform

encephalopathies, Huntington's Disease and systemic AA amyloidosis including the primary amyloidosis of the peripheral nervous system and for diagnosis of said disorders.

- 10. (new) The method according to claim 8, wherein the compound is selected from the group consisting of:
 - N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-0-ethylhydroxylamine;
 - N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-N-propyl-O-ethyl-hydroxylamine;
 - N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)hydroxylamine;
 - N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-O-ethylhydroxylamine;
 - N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-0methyl-hydroxylamine;
 - N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-Npropyl-O-ethyl-hydroxylamine;
 - N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-0-ethylhydroxylamine;
 - N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-N-propyl-O-ethyl-hydroxylamine;
 - N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)-0-ethylhydroxylamine;
 - N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)-N-propyl-O-ethyl-hydroxylamine; and

the pharmaceutically acceptable salts thereof.

11. (new) A compound of general formula (I)

$$R^{1} \xrightarrow{R^{2}} R^{3} \xrightarrow{R^{4}} R^{5}$$

and pharmaceutically acceptable salts or prodrugs thereof, wherein:

n is 0, 1 or 2;

 R^1 and R^2 , independently of each other, are H, OH or OCH₃; R^3 is H or CH₃;

 R^4 is H, C_1 - C_3 straight or branched alkyl or, together with R^3 , forms a five to seven-membered carbocyclic ring; and R^5 and R^6 , independently of each other, are H or C_1 - C_5 straight or branched alkyl

with the provisos that:

 R^1 and R^2 cannot be both hydrogen;

when n is 0, R^1 and R^2 are both hydroxyl, R^3 and R^5 are hydrogen, R^4 cannot be CH_3 ;

when n is 0, R^3 is H and R^4 is H or CH_3 , R^6 cannot be $C_1\text{-}C_3$ straight or branched alkyl;

and that the compounds cannot be:

- 1-(4-hydroxyphenyl)-2-hydroxylaminoethane,
- 1-(4-hydroxyphenyl)-2-hydroxylaminopropane,
- 1-(4-methoxyphenyl)-2-hydroxylaminopropane,
- 1-(3,4-dimethoxyphenyl)-2-hydroxylaminopropane,
- 1-(4-methoxyphenyl)-4-hydroxylaminobutane
- 1-(3-methoxyphenyl)-2-hydroxylaminopropane,
- 1-(3,4-dimethoxyphenyl)-2-hydroxylaminoethane,

- N-methyl-1-(3,4-dihydroxyphenyl)-2hydroxylaminopropane,
- 1-(3-methoxy-4-hydroxyphenyl)-2hydroxylaminopropane,
- N-methyl-1-(3-methoxy-4-hydroxyphenyl)-2hydroxylaminopropane,
- N-methyl-1-(3,4-dimethoxyphenyl)-2hydroxylaminopropane.
- 12. (new) A compound according to claim 11 selected from the group consisting of:
 - N-(5-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-0-methyl-hydroxylamine;
 - N-(5-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-hydroxylamine;
 - N-(5-hydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-propyl-O-ethyl-hydroxylamine;
 - N-(5-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-0-methyl-hydroxylamine;
 - N-(5-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-ethyl-hydroxylamine;
 - N-(5-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-Npropyl-O-ethyl-hydroxylamine;
 - N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-methyl-hydroxylamine;
 - N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-ethyl-hydroxylamine;
 - N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-propyl-O-ethyl-hydroxylamine;
 - N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-butyl-O-ethyl-hydroxylamine;

- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-butyl-O-propyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-methyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-O-ethyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-N-propyl-O-ethyl-hydroxylamine;
- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)hydroxylamine;
- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-N-methylhydroxylamine;
- N-(1-methyl-2-(3-hydroxy-phenyl)-ethyl)-N-propylhydroxylamine;
- N-(1-methyl-2-(3,4-dihydroxy-phenyl)-ethyl)-Npropyl-hydroxylamine;
- N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-N-methylhydroxylamine;
- N-(1-methyl-2-(3-methoxy-phenyl)-ethyl)-N-propylhydroxylamine;
- N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)hydroxylamine;
- N-(1-methyl-2-(3,4-dimethoxy-phenyl)-ethyl)-Npropyl-hydroxylamine;
- N-(5-hydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;
- N-(5-methoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-O-ethyl-hydroxylamine;

N-(5-hydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propyl-O-ethyl-hydroxylamine;

. . .

- N-(5-methoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(5,6-dihydroxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propryl-O-ethyl-hydroxylamine;
- N-(5,6-dimethoxy-1,2,3,4-tetrahydro-2-naphthalenyl-methyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-0-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-N-methyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-Npropyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dihydroxy-phenyl)-propyl)-N-propyl-O-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-O-ethyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-N-methyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-Npropyl-hydroxylamine;
- N-(2-methyl-3-(3,4-dimethoxy-phenyl)-propyl)-Npropyl-O-ethyl-hydroxylamine;

and the pharmaceutically acceptable salts thereof.

13. (new) Pharmaceutical compositions containing one or more compounds of formula (I) according to claim 11 in a mixture with suitable excipients and/or carriers.

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14. (new) Pharmaceutical compositions containing one or more compounds of formula (I) according to claim 11 and a compound for the treatment of central and peripheral nervous system disorders involving protein misfolding and/or misaggregation of beta-amyloid peptide, alpha-synuclein, prion protein and huntingtin selected from Alzheimer's Disease, Lewy body disease, Parkinson's Disease, spongiform encephalopathies, Huntington's Disease and systemic AA amyloidosis, in admixture with suitable excipients and/or carriers.